NOTES

A NEW PANAMANIAN SPECIES OF *LOBELIA* (SECTION *TYLOMIUM*)[1]

Since most of the readily available specimens of Panamanian Campanulaceae had already been assembled and studied for the treatment of that family in the *Flora of Panama*, I was puzzled by Dr. Robert L. Dressler's inquiry as to the identity of a green-flowered lobeliad recently collected on the Atlantic Coast of Panama. Nothing like it was known from the area, and the promised arrival of Dressler's specimens was eagerly awaited. Before they came, an unidentified specimen of Dr. Thomas Croat was received from the Missouri Botanical Garden. Croat's collection came from the same general area and was clearly unlike any other Central American lobeliad. Its closest relative appears to be *Lobelia cirsifolia* Lam. of the Lesser Antilles. Dressler's fine specimens arrived some weeks later and together with Croat's form the basis of the following description.

Lobelia dressleri sp. nov.

Herba erecta, ca. 1 m alta. Caulis tenuiter puberulus demum glabrescens. Petioli glabri, 1–2 cm longi. Lamina foliorum elliptica, ca. 15–30 cm longa et 3–7.5 cm lata, glabra, serrulata. Flores 2.8–3.2 cm longi, 40–70 in racemi cylindrici terminali, 6–8 dm longi; bracteae ellipticae glabrae, ca. 2–10 cm longae. Pedicelli 1.2–3 cm longi, pubescentes patentes. Bracteolati supramedii glabri, lineari vel lanceolati serrulati, 6–10 mm longi et 1–2 mm lati. Hypanthium semiglobosum, glabrum vel pubescentum, 6–9 mm altum et 10–15 mm latum. Lobi calicis anguste triangulares, erecti, glabri, serrulati 5–8 mm alti et basi 2–4 mm lati. Corolla viridis glabra; tubus curvatus in dorso usque ad basim fissus et fenestratus. Filamenta ± connata et glabra. Tubus antherarum 4–6 mm longus, glaber; apices anterarum 5 penicellati. Capsula 8–12 mm alta et 10–15 mm lata.

Reportedly a suffruticose *herb* to 1 m tall with the stem basally to 5 cm in diameter, apparently unbranched or nearly so and inconspicuously spreading short-pubescent. Petioles glabrous 1–2 cm long. *Leaves* cauline, apparently numerous and rather evenly spaced along the stem, spreading-ascendent, thin papery to semichartaceous when dry, inconspicuously serrulate with appressed, incurved teeth, medially 1–3 per cm; blades elliptic, slightly broadest above the middle, acutely tapering both apically and basally, about 15–30 cm long and 3–7.5 cm wide, about 4–6-times as long as wide, glabrous on both the upper and lower surface. *Inflorescence* 6–8 dm long, about 40–70-flowered, narrowly cylindrical. Bracts elliptic, tapering to either end and somewhat broader above the middle, inconspicuously serrulate, glabrous, the upper about 2 cm long and 6–8 mm wide and the lowermost to 10 cm long and 3–4 cm wide. Pedicels stiff, straight, strongly divaricate except distally where upturned at anthesis and somewhat incurved in fruit, 1.2–2.8 cm long in flower and 2–3 cm long in fruit, about 1–1.5 mm in diameter, densely spreading short-pubescent and bearing a pair of linear to lanceolate, serrulate, glabrous bracteoles about three-fourths or more the distance from the base of the pedicel to the hypanthium, 6–10 mm

[1] Research for this paper was carried out with the support of National Science Foundation grant GB-13815 for which grateful acknowledgment is made.

long and 1–2 mm wide. *Flowers* 2.8–3.2 cm long including the hypanthium. Hypanthium at anthesis broadly hemispherical, glabrous or basally spreading short-pubescent, symmetrical or nearly so, 6–9 mm high and 10–15 mm in diameter and with a free calycine rim about 2 mm high. Calyx-lobes at anthesis triangular or deltoid, glabrous, inconspicuously serrulate, 5–8 mm long and 2–4 mm wide at base. Corolla light green, glabrous; the tube distally strongly curved ventrally, dorsally slit at first to within about 6–8 mm and eventually to within 1 mm of the base and with 2 conspicuous lateral fenestrae about 4–6 mm high; corolla-lobes all strongly arching ventrally, the 2 upper linear or linear-lanceolate, 10–15 mm long and about 2 mm wide, acute and the 3 lower lobes 8–12 mm long and 2 mm wide. Filament-tube glabrous, 15–20 mm long, connate except for basal 4–5 mm. Anther-tube 4–6 mm long, glabrous except for the dense tuft of white trichomes about 1 mm long at apex of each anther. *Capsule* somewhat depressed hemispheric, 8–12 mm high and 10–15 mm in diameter, about two-fifths superior terminating in the tapering 2–4 mm long conical base of the style. Seeds compressed, broadly oblong, about 0.8 mm long and 0.6 mm broad, shallowly pitted.

TYPE: Panama: Provincia de Colón, near Coclé del Norte; near beach. 18 August 1972. *Dressler 4206* (DUKE, holotype; PMA, isotype).

Other specimens examined: Panama: Provincia de Colón: Miguel de la Borda along beach. 24 April 1970. *Croat 10016* (DUKE, MO).

This species is named in honor of one of its collectors, Dr. Robert L. Dressler of the Smithsonian Tropical Research Institute. He has served as an apparently willing and certainly most amiable guide to countless visiting biologists who have depended upon him for an introduction to the biotic diversity of Panama. Dr. Dressler has not collected great numbers of specimens during his years of Panamanian residence, but what he collects has been done with a very discriminating eye and with great care. The type collection was unusually carefully prepared which is something of a rarity in this day when the average specimen made by a systematic botanist ought to shame even a molecular biologist.

This most distinctive species was found, like so many new Panamanian species, in an area within fifty miles of the Panama Canal Zone. It again emphasizes the need for extensive and intensive general collecting from throughout the neotropics, for contrary to the opinion held by many biologists, our herbaria and museums are not overflowing with countless overlooked specimens of these same undescribed species. Panama has doubtless had more than its share of biological exploration, but even so vast areas have never been adequately collected and much of it has not even been collected at all.

This species belongs to section *Tylomium* (Presl) Benth. & Hook. This species group is characterized by shallowly pitted seeds, non-bluish flowers (either red, purplish, white, or green), non-basal, conspicuously bracteolate pedicels and a stoutly herbaceous or subshrubby habit. The approximately twenty species of this section range about the Caribbean from the Greater Antilles south through the Lesser Antilles and perhaps onto Trinidad. On the mainland its species have

been previously known only from northern Central America (Guatemala, Honduras, and probably Nicaragua).—*Robert L. Wilbur, Department of Botany, Duke University, Durham, North Carolina 27706.*

NOTES ON PANAMANIAN APOCYNACEAE

Since the publication of the account of the Apocynaceae for the *Flora of Panama* (Ann. Missouri Bot. Gard. 57: 59–130. 1970), a number of noteworthy additional collections have become available. These include several species new to Panama, two representing genera previously unreported outside Amazonia and another a genus new to North America, the first fruiting collection of several species, new species of *Prestonia*, *Mandevilla*, *Stenosolen*, and *Malouetia*, and some significant range extensions within Panama. All specimens referred to are at MO unless otherwise noted.

1. *Aspidosperma darienense* Woods. *ex* Dwyer, Ann. Missouri Bot. Gard. 53: 105. 1966. This species has been previously known only from the holotype collection, *Sexton & Knight s.n.*, from Darién Province between Río Chucunaque and Río Canglón. A second collection of *Aspidosperma* from the same general area matches the type. This collection, *Duke 8589*, from Darién Province along the Río Chucunaque between Río Membrillo and Río Subcuti, is in fruit, making possible the description of the fruit of *A. darienense*. The fruit is a woody follicle, in the form of an asymmetrically truncated circle (unequally convex-plane in Woodson's terminology) 6.5 cm in longest diameter and 4.7 cm in shortest diameter. It is smooth, flat with no midrib, conspicuously yellow puberulent, and lacks a stipe. The seeds are thin, flat, concentrically winged, 4.5 cm in shortest diameter, 6.2–6.5 cm in longest diameter with a 5-cm-long funicle. The tree is described as 8 inches d.b.h. with a fluted trunk. The fluted trunk supports Dwyer's placement of *A. darienense* in series *Nitida*, but the non-verrucose fruit separates it radically from other species of that series.

2. *Aspidosperma marcgravianum* Woods., Ann. Missouri Bot. Gard. 38: 170. 1951. A second species of *Aspidosperma* with fluted trunk also occurs in Panama. This species is represented by *Dressler 3440* with both flowers and young fruits. The collection was not named by Nowicke (Ann. Missouri Bot. Gard. 57: 84. 1970), although she discussed it under *A. darienense*. The specimen matches Venezuelan material of *A. marcgravianum* Woods. (e.g. *Steyermark 86928*) as well as the Brazilian type. *Aspidosperma marcgravianum* is closely related to *A. excelsum* Benth. but can be distinguished by its smoother lower leaf surface and stipitate fruit. In Panama, *A. marcgravianum* is a large tree, commonly reaching 30 meters in height. It has a conspicuously fluted trunk and is relatively common in the tropical wet forest life zone of Santa Rita Ridge, Colón Province.

3. *Aspidosperma cruentum* Woods., Amer. Jour. Bot. 22: 684. 1935. The commonest Panamanian species of *Aspidosperma* was treated by Woodson (Ann. Missouri Bot. Gard. 38: 192. 1951) and in the *Flora of Panama* as *A. megalo-*